IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of: \$ \$ Hsiao-Wen Wan et al. \$ Attorney Docket No.: 24061.93 / 2003-0372

Hsiao-Wen Wan et al.

Serial No.: 10/821,016

Serial No.: 10/821,016

Serial No.: 2444

Filed: April 8, 2004 § Examiner: Peling A. Shaw

Semiconductor Manufacturing Environment §

APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is submitted in connection with an appeal from the final rejection of the Examiner, dated April 15, 2009, finally rejecting claims 1-26, all of the pending claims in the above-identified application.

REAL PARTY IN INTEREST

The real party in interest is TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD., a Taiwanese company having a principal office and place of business at No. 8 Li-Hsin Rd., 6 Science-Based Industrial Park, Hsin-Chu, 300-77, Republic of China (Taiwan).

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences regarding the above-identified patent application.

STATUS OF CLAIMS

Claims 1-26 are pending, stand finally rejected, and are on appeal here. Claims 1-26 are set forth in the CLAIMS APPENDIX attached hereto.

STATUS OF AMENDMENTS

No amendments were presented in response to the final Office action mailed April 15, 2009.

SUMMARY OF CLAIMED SUBJECT MATTER

One embodiment of the present invention, as now set forth in independent claim 1, relates to a computer-implemented method for circulating a file between the entities in a semiconductor manufacturing environment with a plurality of separate entities (Fig. 3; paras. 0024-0029). The method comprises selecting at least one of a plurality of input files (Fig. 1, step 102; para. 0016); selecting an output file format from a plurality of output file formats (Fig. 1, step 104; para. 0017); and selecting a mode for circulation from a plurality of modes for circulation (Fig. 1, step 106; para. 0018). The method further comprises extracting file information from the selected at least one input file to an output file in the selected output file format (Fig. 1, step 110; para. 0019); and circulating the output file to at least one recipient entity using the selected mode for circulation (Fig. 1, step 116; para. 0022).

Another embodiment of the present invention, as now set forth in independent claim 10, relates to a computer-implemented method for circulating a file associated with the manufacture or sale of semiconductor devices (Fig. 6, method 600; para. 0050). The method comprises closing an application file responsive to a user request (Fig. 6, step 602; para. 0051); querying the user if the application file is to be circulated (Fig. 6, step 604; para. 0052); and if the application file is to be circulated, checking and determining the application file type (Fig. 6, step 608; para. 0053). The method further comprises preparing the application file for circulation, wherein the preparing comprises converting the application file to another application file type if necessary (Fig. 6, step 610; para. 0053); and circulating the output file to at least one recipient using a selected one of a plurality of circulation modes (Fig. 6, steps 614-618; paras. 0055-0057).

Yet another embodiment of the present invention, as now set forth in independent claim 19, relates to a system for circulating a file. The system comprises a virtual fabrication system (Fig. 4, system 400) comprising a plurality of components located in at least two different locations (Fig. 4, entities 200 and 402-412; para. 0040), the components connected by a network (Fig. 4, network 414; para. 0030); a memory system connected to the network configured to store files regarding the operation of the virtual fabrication system (Fig. 4, business database 428; para. 0032); and a communication system connected to the network (Figs. 2 and 4, email system 200; paras. 0023), and configured to extract data from at least one input file to an output file having a format selected from one of a plurality of file formats (Fig. 1, step 110; para. 0019) and circulate the output file to a plurality of recipients using a selected one of a plurality of modes for circulation (Fig. 1, step 116; para. 0022).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-5, 7, 10-14, 16 and 19-23 were rejected under 35 U.S.C. 102(b) as being anticipated by Lu et al., "B2B in TSMC Turnkey Services" (hereinafter "Lu").

Claims 6, 8-9, 15, 17-18, and 24-26 were rejected under 35 U.S.C. §103 as being unpatentable over Lu in view of U.S. Patent No. 6,363,414 to Nicholls et al. (hereinafter "Nicholls").

ARGUMENT

As detailed below, Appellant believes that the Examiner has improperly rejected independent claims 1, 10, and 19, as well as all claims dependent therefrom, as being unpatentable over Lu either alone or in combination with Nicholls.

A. Rejection of claims 1-5, 7, 10-14, 16, and 19-23 as anticipated by Lu

Independent claim 1, as amended, requires inter alia:

selecting at least one of a plurality of input files;
selecting an output file format from a plurality of output file formats;
selecting a mode for circulation from a plurality of modes for circulation; . . . and

circulating the output file to at least one recipient entity using the selected mode for circulation.

1. <u>selecting at least one of a plurality of input files</u>

In the final Office action, the Examiner cited the third paragraph on the left column of page 41 and the fifth paragraph on the right column of page 41 as disclosing "selecting at least one of a plurality of input files." Those paragraphs are reproduced below for ease of reference:

At first, the target was providing the integrated WIP, including WIP in FAB, circuit probing (CP), assembly and final test, yield data and ship alerts to customers. In this period, it produced some kinds of data to ask the subcontractors to provide. These data included electronic purchase orders (e-PO), the confirmed shipping dates from subcontractors (SOD), the lots in the subcontractors' factories (WIP), the transaction of entering inventory (named INSLIP), the lots in subcontractors' finished goods (named FG Bank) and the shipping information (named SHIPOUT)...

After developing the phase I and phase II, there is now a proper B2B architecture. But there is still something missing before the system becomes a real B2B system. What is the real B2B system? it must integrate the information, material and cash flows. After phase II was released, it didn't integrate the cash flow into the system. It used the work order and the INSLIP data to make payments automatically. And at the same time, it didn't provide proper data for CRM, SCM and ERP. For these 2 reasons, there are 2 modifications to the system design.

Applicants respectfully traverse the Examiner's position in this regard and submit that the paragraphs teach, at best, entry of INSLIP data, which is clearly not equivalent to selecting at least one of a plurality of input files. In particular, no selecting of any sort of file is taught, much less selection of one of a plurality of input files as recited in claim 1. Moreover, the Examiner's statement in section 11.b. of the Advisory Action that the teaching of the above-noted paragraphs "seems to allow selecting from different inputs" (emphasis added) evinces the Examiner's lack of certainty concerning the teachings of Lu in this regard and appears to be based on a general feeling of the Examiner about the teachings of the reference as opposed to what the reference actually teaches.

2. <u>selecting an output file format from a plurality of output file formats</u>

The Examiner cites the final paragraph on page 43 through the first paragraph on page 44 as disclosing "selecting an output file format from a plurality of output file formats." That paragraph is reproduced below for ease of reference:

Originally, subcontractor will inform TSMC when the lot was finished though e-mail, phone or FAX. After getting the information, TSMC could send a shipping instruction to subcontractors and a shipping alert to customers through FAX. The new system changes the flow of shipment. When subcontractors complete the lot, they will send an INSLIP transaction to TSMC. After receiving the INSLIP transaction, the system will processes some checks to make sure the good is ready for shipping automatically. If the lot is ready, then the system will send a shipping instruction through a XLM format to the subcontractors and a shipping alert to the customer through e-mail. The new flow could reduce by at least 2 days the time from lot finish to shipment, auto issues shipping instructions instead of FAX and auto issue sipping alerts to Customer instead of FAX.

Again, Applicants respectfully traverse the Examiner's position and submit that the cited text, reproduced above, merely teaches sending data in a single predetermined output file <u>format</u> (i.e., XML format); it clearly fails to teach selection of an output file format from a plurality of available formats. Once again, the Examiner's comments in the section 11.b of the Advisory Action that "Lu <u>seems to</u> have the . . . limitations" (emphasis added) evinces the Examiner's lack of certainty concerning the teachings of Lu in this regard.

3. <u>selecting a mode for circulation from a plurality of modes for circulation and circulating</u> the output file to at least one recipient entity using the selected mode for circulation

The final paragraph on page 43 through the first paragraph on page 44 is also cited as teaching "selecting a mode for circulation from a plurality of modes for circulation . . . and circulating the output file . . . using the selected mode for circulation." Yet again, Applicants respectfully traverse the Examiner's position and submit that the cited text teaches only a single mode for circulation (i.e., e-mail); it clearly flails to teach selection of a mode from a plurality of modes and then circulating the output file using the selected mode, as recited in claim 1.

In summary, the system of Lu discloses a system for circulating data in a fixed format via a fixed mode of communication. Clearly, such a system is <u>not</u> anticipatory of the system clearly recited in claim 1. In view of the foregoing, it is apparent that Lu fails to anticipate claim 1 and the subject rejection should therefore be withdrawn. Independent claims 10 and 19 includes limitations similar to those of claim 1 in this regard and is therefore also deemed to be allowable over Lu. Claims 2-5, 7, 11-14, 16, and 20-23 depend from and further limit claims 1, 10, and 19 and are therefore also deemed to be in condition for allowance for at least that reason.

B. Rejection of claims 6, 8-9, 15, 17-18, and 24-26 as unpatentable over Lu in view of Nicholls Claims 6, 8-9, 15, 17-18, and 24-26 depend from and further limit claims 1, 10, and 19 are therefore also deemed to be in condition for allowance for at least that reason.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the cited references fail to anticipate, teach, suggest, or render obvious the subject matter of claims 1-26. For all of the foregoing reasons, this Board is respectfully requested to reverse the Examiner's decision rejecting claims 1-26 and allow all pending claims. A prompt decision to that effect is earnestly solicited.

D-1792599_1.DOC

Respectfully submitted,

Prandi W. Sarfatis Registration No. 37,713 Attorney for Appellant

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Name

CLAIMS APPENDIX

1. In a semiconductor manufacturing environment with a plurality of separate entities, a computer-implemented method for circulating a file between the entities comprising:

selecting at least one of a plurality of input files;

selecting an output file format from a plurality of output file formats;

selecting a mode for circulation from a plurality of modes for circulation;

extracting file information from the selected at least one input file to an output file in the selected output file format; and

circulating the output file to at least one recipient entity using the selected mode for circulation.

- 2. The computer-implemented method of claim 1, wherein the at least one input file comprises a product manufacturing report from a semiconductor foundry.
- 3. The computer-implemented method of claim 1, further comprising converting the at least one input file to a different file format prior to the extracting.
- 4. The computer-implemented method of claim 1, wherein the mode for circulation comprises e-mail.
- 5. The computer-implemented method of claim 1, wherein the mode for circulation comprises facsimile.
- 6. The computer-implemented method of claim 1, wherein the mode for circulation comprises a wireless device.
- 7. The computer-implemented method of claim 1, wherein the at least one input file comprises at least two input files.
- 8. The computer-implemented method of claim 1, wherein the mode for circulation comprises sending an e-mail to at least two different entities, the at least two different entities having different e-mail systems.

- 9. The computer-implemented method of claim 1, wherein the mode for circulation comprises sending an e-mail to at least one entity, and sending a facsimile to at least one other entity, the at least one other entity being at a different location than the at least one entity.
- 10. A computer-implemented method for circulating a file associated with the manufacture or sale of semiconductor devices, the method comprising:

closing an application file responsive to a user request;

querying the user if the application file is to be circulated;

if the application file is to be circulated, checking and determining the application file type; preparing the application file for circulation, wherein the preparing comprises converting the application file to another application file type if necessary; and

circulating the output file to at least one recipient using a selected one of a plurality of circulation modes.

- 11. The computer-implemented method of claim 10, wherein the application file comprises a product manufacturing report from a semiconductor foundry.
- 12. The computer-implemented method of claim 10, wherein preparing the application file comprises converting the application file to a different file format.
- 13. The computer-implemented method of claim 10, wherein a mode for circulating comprises e-mail.
- 14. The computer-implemented method of claim 10, wherein a mode for circulating comprises facsimile.
- 15. The computer-implemented method of claim 10, wherein a mode for circulating comprises a wireless device.
- 16. The computer-implemented method of claim 10, wherein the application file comprises at least two separate application files.
- 17. The computer-implemented method of claim 10, wherein circulating comprises sending an e-mail to at least two different users, the at least two different users having different e-mail systems.

- 18. The computer-implemented method of claim 10, wherein circulating comprises sending an e-mail to at least one user, and sending a facsimile to at least one other user, the at least one other user at a different location than the at least one user.
 - 19. A system for circulating a file, the system comprising:
- a virtual fabrication system comprising a plurality of components located in at least two different locations, the components connected by a network;
- a memory system connected to the network configured to store files regarding the operation of the virtual fabrication system;
- a communication system connected to the network, and configured to extract data from at least one input file to an output file having a format selected from one of a plurality of file formats and circulate the output file to a plurality of recipients using a selected one of a plurality of modes for circulation.
- 20. The system of claim 19, wherein the at least one input file comprises a product manufacturing report from a semiconductor foundry.
- 21. The system of claim 19, wherein the communication system is adapted to convert the at least one input file to a different file format.
 - 22. The system of claim 19, wherein the communication system is adapted to send emails.
- 23. The system of claim 19, wherein the communication system is adapted to send facsimiles.
- 24. The system of claim 19, wherein the communication system is adapted to send the files to a wireless device.
- 25. The system of claim 19, wherein the communication system is adapted to send emails and facsimiles.
- 26. The system of claim 19, wherein the communication system is adapted to send emails, facsimiles, and files to a wireless device.

EVIDENCE APPENDIX

Not applicable to the present appeal

RELATED PROCEEDINGS APPENDIX

Not applicable to the present appeal